CLAIM AMENDMENTS

1-6. (canceled)

7. (currently amended): A method to obtain a database of signal transduction protein localization profiles in response to toxic compounds, which method comprises

recording the intracellular localization pattern of ~~at least one~~ a multiplicity of signal transduction ~~protein~~ proteins in a cell type,

providing a set of toxic compounds,

contacting each compound of said set of toxic compounds with said cell type,

recording the intracellular localization pattern of ~~at least one~~ a multiplicity of said signal transduction proteins in said cell type in the presence of each compound in said set of toxic compounds, ~~optionally as a function of time,~~

wherein each intracellular localization pattern is constructed by concurrently determining the presence, absence or amount of said signal transduction protein in at least three cellular locations selected from the group consisting of nuclear, perinuclear, diffuse cytoplasmic, cytoplasmic fibril-associated, and membrane-associated locations;

wherein each intracellular localization pattern is recorded in computer-readable and retrievable form.

8. (previously presented): The method of claim 7 wherein at least one of said signal transduction proteins is a protein kinase C (PKC) isoenzyme.

9-10. (canceled)

11. (previously presented): The method of claim 7 wherein each of said intracellular localization patterns is observed using a wide-field microscope.

12. (previously presented): The method of claim 7 wherein each of said intracellular localization patterns is observed by labeling the proteins with specific antibodies.

13. (original): A computer-readable database prepared by the method of claim 7.

14-19. (canceled)

20. (currently amended): A method to identify a set of signal transduction proteins whose intracellular localization pattern changes significantly in response to toxic compounds, which method comprises

arbitrarily identifying a first set of signal transduction proteins;

providing a set of toxic compounds;

contacting a cell comprising each ~~member~~ of said first set of signal transduction proteins with each one of the toxic compounds;

determining the changes in intracellular localization pattern of each of the signal transduction proteins of said first set in response to each of the toxic compounds;

discarding those signal transduction proteins from said first set whose changes in intracellular localization pattern are redundant;

adding new signal transduction proteins to provide a second set of signal transduction proteins;

contacting cells comprising each ~~member~~ of said second set of signal transduction proteins with each of the toxic compounds;

determining the changes in the intracellular localization pattern of each of the signal transduction proteins of said second set in response to each of the toxic compounds;

discarding those signal transduction proteins from said second set whose changes in intracellular localization patterns are redundant; and

repeating the steps for which the second set of signal transduction proteins was used until a final set of proteins is obtained which provides at least five principal components with respect to ~~the range of compounds marketed as~~ small organic molecules.

21. (previously presented): The method of claim 7, which further includes the step of recording the intracellular localization pattern of said signal transduction protein in said cell type in the presence of each compound of said set of toxic compounds as a function of time.

22. (currently amended): The method of claim 7, wherein said method is performed in at least two cell types ~~which further includes the step of recording the intracellular localization pattern~~

~~of said signal transduction protein in said cell type, then contacting each compound of said set of toxic compounds with a second cell type, and recording the intracellular localization pattern of said first signal transduction protein in said second cell type in the presence of each compound of said set of toxic compounds.~~